REMARKS

The Official Action of 24 June 2005 has been carefully considered and reconsideration of the application as amended is respectfully requested.

Claim 1 has been amended to render the claim more definite with the deletion of redundant phrase and with the recitation that the filling material, which is provided in the depressions between the magnetic particles, does not accumulate on level surfaces of the magnetic particles. New claims 10-12 have been added more completely to define the subject matter which Applicants regard as their invention. Withdrawn claim 8 has been amended to place it into better form for rejoinder if and when the product claim from which it depends is found to be allowable (see MPEP Section 821.04).

Support for the recitations in claims 1, 3, 10 and 11 pertaining to the filling material being provided in the depressions only, and to the corrosion inhibiting coat containing first portions that contact the powdered magnetic particles and second portions that contact the filling material, appears in the specification as filed at, for example, page 7, lines 14-16; page 9, first full paragraph; and Figs. 1 and 3 of the drawings. Support for the recitations in claim 12 appears in the specification as filed at, for example, the paragraph bridging pages 10 and 11.

The amendment to claim 1 clarifies that the "powdered magnetic particles" are made of the "rare earth-transition metal alloy powder" and thereby removes the basis for the rejection

under 35 USC 112, second paragraph appearing at paragraph 3 of the Official Action. All claims as amended are respectfully believed to be sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph.

The claims stand rejected under 35 USC 103(a) as allegedly being unpatentable over Sagawa et al in view of Nakayama et al or over this combination of references further in view of Strnat. Applicants respectfully traverse these rejections.

The claimed invention is based at least in part on the Applicants' discovery that it is possible to achieve a resin bonded rare earth magnet with superior corrosion resistance by filling depressions in a compression molded body of the magnet with powdered filling material and resin and then fixing the filling material by curing the resin to reduce surface roughness, before coating the magnet with a synthetic resin. Applicants also discovered that, to achieve superior corrosion resistance with such magnet, it is critical to set the powder size of the filling material within the claimed limits of 0.1 to 15μm. If the powder size is less than 0.1 micron, there would be a tendency for the filler to accumulate on level surfaces as well as in spaces between the particles (specification at page 7, lines 14-17). If the powder size is over 15 microns, the filler would fill only the larger of the spaces between magnetic particles and leave smaller spaces empty (specification at page 7, lines 19-21).

The criticality of the claimed powder size is shown by evidence of record in the specification of the present application. Specifically, Fig. 6 shows how magnet surface

roughness depends on the particle size of the SiO_2 used as filler in the examples and how this affects the occurrence of rust (see specification at paragraph bridging pages 12-13). As can be seen in Fig. 6, the SiO_2 particle size 0.05 μm of sample (g), which is below the claimed limit, did not achieve the optimal results in improving surface roughness or corrosion resistance. Similarly, the SiO_2 particle size 20 μm of sample (m), which is above the claimed limit, did not achieve optimal results in the surface roughness or corrosion resistance evaluations.

The cited art does not set forth even a *prima facie* case of obviousness for the invention as now claimed because the art, even if properly combinable, would not show or suggest all of the claim limitations (see MPEP Section 706.02(j)). For one thing, the cited art does not show or suggest the selective provision of filling material in (only) depressions of a magnet body for any purpose (i.e., for the purpose of smoothing the surface of the magnet or otherwise).

The primary reference, Sagawa, shows only the formation of powder compacted layers and resin layers which coat the entire surface of a workpiece (including depressions, level surfaces, etc.). Indeed, in teaching the necessity for a uniform distribution of the powder compacted layer over a surface of the workpiece (Sagawa at column 7, lines 5-30), Sagawa teaches away from the selective filling of depressions as required by the claims. Moreover, the method for forming the powder compacted layer described in Sagawa, comprising first forming a resin layer on the workpiece and then capturing powder material therein (Sagawa at column 11 et seq), may not appropriately be used to fill in only select portions (depressions) of a

workpiece. Indeed, given the principles surrounding formation of Sagawa's powder compacting layer, the powder compacting layer must be fixed into depressions in the magnet body, if at all, by pressure ("forced into the pores") and the remainder of the powder compacted layer nevertheless accumulates on other (non-depressed) surfaces of the workpiece. In workpieces formed by the method described in Sagawa, a corrosion resistant coat atop the workpiece contacts only the powder compacted layer and does not contact magnetic particles of the magnet body (see Sagawa at Figs. 22 - 24). In this circumstance, any modification of Sagawa to arrive at the claimed invention, which requires selective provision of the filling material only in depressions, would change the principle of operation of the reference, which is impermissible (see MPEP Section 2143.01).

In any event, the cited secondary references also do not show the selective provision of filling material in depressions of a magnet body such that the proposed combination of references, even if proper, would not show all of the claim limitations. Nakyama describes in column 2, lines 50-60 that it is desirable to set the surface roughness Ra of the magnet to be 1μm. However, Nakayama polishes the surface of the magnet, such as by barrel polishing, buffing, lapping or ordinary polishing (Nakayama at column 6, lines 24-26). Similarly, Stnart neither discloses nor suggests the configuration of the claimed invention for reducing surface roughness by directly filling filler material into depressions (only) between powdered magnetic particles.

As discussed above, Sagawa, Nakayama and Stnart do not disclose, either alone or in combination, selective provision of filling material and resin in depressions of a magnet body or that this selective provision could be used to provide a magnet with a surface roughness of less than 3μm. Accordingly, the cited references are incompetent even to set forth a *prima facie* case of obviousness for the invention as now claimed. Moreover, even assuming for the sake of argument that the references could set forth a *prima facie* case, Applicants respectfully submit that the evidence of record in the specification would be sufficient to rebut the same.

In this connection, as discussed above, the evidence of record shows the criticality of providing the filling material with a particle size of between 0.1 to 15μm. In contrast, Sagawa teaches that the particle size of the powder described therein can be in a much broader range (0.05 to 500μm). Accordingly, it is respectfully submitted that the evidence of record showing the criticality of the claimed range could not have been expected from the cited references and would be sufficient to rebut any alleged *prima facie* case of obviousness set forth by the cited references (see MPEP 2144.05(III)).

In view of the above, it is respectfully submitted that all rejections and objections of record have been overcome and that the application is now in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,

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